WHAT IS CLAIMED IS:

- 1. A method for introducing a gene into a plant, which comprises introducing a gene into a plant cell using a vector containing an adventitious shoot redifferentiation gene as a selectable marker gene under the control of a light-inducible promoter.
- 2. The method according to claim 1, which further comprising selecting a transgenic tissue using, as an index, morphology of an adventitious shoot redifferentiated by expression of the adventitious shoot redifferentiation gene which is the selectable marker gene which has been introduced into the plant cell.
- 3. The method according to claim 1, wherein the light-inducible promoter is a promoter of a ribulose 2-phosphate carboxylase small subunit gene.
- 4. The method according to claim 1, wherein the adventitious shoot redifferentiation gene is a cytokinin-related gene.
- 5. The method according to claim 4, wherein the cytokinin-related gene is an ipt, isopentenyl

transferase, gene which is present in a microorganism belonging to the genus Agrobacterium.

- 6. A vector for introducing a gene into a plant, which comprises a desired gene, an adventitious shoot redifferentiation gene as a selectable marker gene under the control of a light-inducible promoter, and a removable DNA element, wherein the selectable marker gene is positioned such that it behaves integrally with the removable DNA element, and wherein the desired gene is positioned such that it does not behave integrally with the removable DNA element.
- 7. The vector according to claim 6, wherein the selectable marker gene is present within the removable DNA element.
- 8. The vector according to claim 6, wherein the light-inducible promoter is a promoter of a ribulose 2-phosphate carboxylase small subunit gene.
- 9. The vector according to claim 6, wherein the adventitious shoot redifferentiation gene is a cytokinin-related gene.

- 10. The vector according to claim 9, wherein the cytokinin-related gene is an *ipt*, isopentenyl transferase, gene which is present in a microorganism belonging to the genus *Agrobacterium*.
- 11. The vector according to claim 6, wherein the removable DNA element is derived from a site-specific recombination system.